

**MONTGOMERY COUNTY GOVERNMENT
ROCKVILLE, MARYLAND
CLASS SPECIFICATION**

**Code No. 000554
Grade 20**

INFORMATION TECHNOLOGY SPECIALIST I

DEFINITION OF CLASS:

This is entry level professional information systems technology work. Contacts include other technology specialists, technicians, agency technology end users at all levels, vendors, and individuals outside the government to exchange information, offer technical advice, resolve problems, and coordinate projects or activities. The work involves providing limited service and assistance to the public.

The work of this class involves duties such as writing computer programs/code; preparing test data and test programs; installing, customizing, and maintaining operating and network system hardware and software; troubleshooting and resolving computer operating system problems; assisting with the design and development of databases; performing systems analysis and system security functions and developing system specification requirements. The work requires knowledge of specific applications, programming languages, systems, hardware or emerging technology applications. The work is performed independently and is reviewed for technical soundness, appropriateness and conformity to policy. Guidelines for the work are normally available, but are not completely applicable to the work. An incumbent uses judgment and resourcefulness to modify, adapt or deviate from guides to accomplish the work. The employee may recommend changes to guides as necessary. The work involves problem-solving, planning and organizing in developing and customizing information system components for specific customer needs. The work encompasses a range of activities which directly affect the operation of department/agency/County Government functions. The work is primarily sedentary, primarily performed in an office environment, and involves no significant hazards to an employee. An incumbent uses a keyboard and video display terminal in the work; however, use of this equipment is not production-oriented. An employee in this class may occasionally be required to lift equipment weighing up to 50 pounds.

EXAMPLES OF DUTIES: (Illustrative Only)

- Serves as a troubleshooter for specific routine applications. This might include serving in a “help desk” environment. Provides assistance and guidance to users of specific operating systems, software packages or hardware. Quickly identifies problems, and takes the necessary corrective action.
- Writes new code to modify an existing operating system in order to satisfy the needs of a particular end user.
- Sets up and configures systems, equipment and software; develops and implements backup and recovery procedures considering user requirements and technical constraints.
- Develops complex spreadsheet, word processing, or desktop publishing applications.
- Participates in a team in the development of new system requirements. This role can include working with other higher level technology specialists in the conduct of research on the capabilities of various systems including hardware, operating system environment, user support, etc. Systems

researched can include small to large applications as well as systems that support an activity, program or government-wide applications.

- Provides support to the development of specification requirements for technology procurements at the agency/department level or below. Provides input to the technical requirements based on the needs of the organization as well as determining capability with an existing technology operating environment.
- Writes systems documentation in support of computer applications. Written documentation includes new systems requirements, modifications to existing systems, changed requirements of system updates, and new versions of software applications.
- Assists with the analysis of data processing requirements to plan systems that will provide system capabilities required for projected work loads, and assists with planning layout and installation of new systems or modifications of existing systems.
- Confers with users, customers and project managers to obtain information on limitations and capabilities of existing systems and capabilities required for technology projects.
- Performs related duties as required.

CORE COMPETENCIES/ KNOWLEDGE, SKILLS AND ABILITIES:

Technical Competencies (An incumbent possesses competency in one or more of the technical areas below):

- Basic competency in/knowledge of operating systems, including a basic understanding of desktop applications, database management, help desk operations and troubleshooting, user training/support, LAN support, departmental programs, server administration, network administration, system design, emergency control center, and mainframe operating systems and their applications in order to assure continual, uninterrupted operation of computer systems and equipment.
- Basic competency in/knowledge of programming languages and software packages such as JCL, SQL, Visual basic, Windows, word processing, and other database and data presentation packages to design, develop and support end users. Basic competency in/knowledge of program menus, project planning and evaluation, program development, management support, strategic planning, network management, training and emergency control center. Some positions in this class may require the knowledge of job control language and ROSCOE in order to initiate certain operational requests, standard reports and other applications associated with computer operations.
- Basic competency in/knowledge of information systems/network security methods, including plan network implementation, system security, training, mainframe use, network administration,, systems analysis, emergency control center, and RFP development, for ensuring, protecting and resolving the security of information systems and network services.
- Basic competency in infrastructure design, including system integration, planning and evaluating, program development, systems application development, troubleshooting, network management, internet/intranet, contractor management, LAN support, network security, user support, hardware/software support, systems analysis, systems design, voice systems, and RFP development.
- Basic competency in web technology, including database management, new systems solutions, web development/maintenance, internet/intranet, applications development, data warehousing, and eCommerce.
- Basic competency in systems integration, including program menus, application integration, plan network integration, new systems solutions, troubleshooting, strategic planning, contractor management, system security, training, hardware/software support, project management, system design, and voice systems.

- Basic competency in database administration, including program menus, database management, disaster recovery, troubleshooting, data processing and analysis, data warehousing, and customer maintenance and service.
- Basic competency in technology applications to conduct research and development activities to plan, implement and administer new technologies.

General Competencies:

- Basic knowledge of the principles, methods, and tools for automating, developing, implementing and administering database management systems.
- Basic knowledge of principles, methods, and procedures for optimizing, integrating and installing information systems components.
- Basic knowledge of the principles and methods of web technologies, tools and delivery systems.
- Basic knowledge of the architecture and typology of software, hardware and networks, including LANs, WANS and telecommunication systems, their components and associated protocols and standards.
- Basic knowledge of computer network, desktop, and mainframe operating systems and their applications.
- Basic knowledge of methods for ensuring, protecting and resolving problems involving the security of information systems and network services.
- Ability to organize work, set priorities, and determine resource requirements.
- Ability to make sound, well-informed, creative and objective decisions, perceive the impact and implications of decisions, and commit to action, even in uncertain situations, in order to accomplish organizational goals.
- Ability to apply knowledge of basic information technology concepts, practices, and methods to evaluate alternatives, solve basic technology problems, and make recommendations.
- Ability to work with clients and customers with courtesy and tact to meet their needs.
- Ability to communicate effectively, both orally and in writing.
- Ability to attend meetings or perform other assignments at locations outside of the office, if necessary.

MINIMUM QUALIFICATIONS:

Experience: One (1) year professional experience in the information technology field in areas such as programming, systems analysis, computer operations, data control and preparation, and data/telecommunications, depending on the duties of the position.

Education: Bachelor's degree in computer science or a related field from an accredited college or university, or certifications in specific programming languages or operating systems may be required, depending on the duties of the position. Programming languages might include Visual C++, Visual J++, C++, C, SQL, PowerBuilder, Oracle Developer 2000, and COBOL.

Equivalency: An equivalent combination of education and experience may be substituted. For applicants possessing very hard-to-find skills which are a critical need to the department/agency, training and certification may be accepted in lieu of full degree requirements.

Physical Abilities: Ability to lift boxes containing computer support items and equipment such as printers, computers, modems, and monitors weighing up to 50 pounds.

LICENSE: None.

PROBATIONARY PERIOD:

Individuals appointed to a position in this class will be required to serve a probationary period of twelve (12) months and, if promoted to a position in this class, will be required to serve a probationary period of six (6) months. Performance will be carefully evaluated during the probationary period. Continuation in this class will be contingent upon successful completion of the probationary period.

MEDICAL EXAM PROTOCOL: Core Exam.

Class Established: July, 2001

Revised: October, 2011

August, 2013

September, 2014